

DERWENT- 1987-181873

ACC-NO:

DERWENT- 198726

WEEK:

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TITLE: Water-contg. plaster - comprising polyacrylate monovalent salt, hydrophilic polymer having carboxyl gps., aluminium salt, poly:ol, etc.

PATENT-ASSIGNEE: NITTO ELECTRIC IND CO [NITL]

PRIORITY-DATA: 1985JP-0251733 (November 8, 1985)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
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JP 62111918	A May 22, 1987	N/A	007	N/A
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APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
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JP 62111918A	N/A	1985JP-0251733	November 8, 1985
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INT-CL A01N025/10, A61K007/46 , A61K009/70 , A61K049/00 ,
(IPC): A61L015/06

ABSTRACTED-PUB-NO: JP 62111918A

BASIC-ABSTRACT:

Plaster contains, as main components, polyacrylate monovalent salt and water in an amt. of 20-80 wt.%, hydrophilic polymers which have carboxyl gp., aluminium salts, polyhydric alcohols and drugs for percutaneous absorption.

Usable polyacrylate monovalent salts are those whose wt. average molecular wt. is more than 1000000 and whose stoichiometrical neutralised ratio is 50-100%. Pref. content of polyacrylate

monovalent salts is 3-30 wt.%. Pref. content. of Al salts is 0.005-0.2 wt.%.

USE/ADVANTAGE - The structure of gel is rigid and shape of gel is kept at higher temp.. Because of the richness of water content, coolness is kept for a long time and the effect of percutaneous drug is maintained. Adhesion to the skin is good and safety is higher than plaster using epoxy crosslinking agent or urethane crosslinking agent. Because of high content of polyhydric alcohols, either lipophilic or hydrophilic drug can be dissolved.

CHOSEN- Dwg.0/0
DRAWING:

TITLE- WATER CONTAIN PLASTER COMPRISE POLYACRYLATE MONOVALENT
TERMS: SALT HYDROPHILIC POLYMER CARBOXYL GROUP ALUMINIUM SALT
POLY OL

DERWENT-CLASS: A14 A96 B07 D22 P34

CPI-CODES: A04-F04; A12-V01; A12-V03A; B04-C03B; B05-A01B; B12-M02D;
D09-C04B;

CHEMICAL- Chemical Indexing M1 *01* Fragmentation Code H7 H714 H721
CODES: J0 J011 J1 J171 M210 M212 M262 M281 M320 M423 M430 M510
M520 M530 M540 M630 M782 M903 M904 M910 R021 R041 V0 V742
Specific Compounds 06726M Registry Numbers 87140 1286M

Chemical Indexing M2 *02* Fragmentation Code A313 A940
A960 C710 C730 M411 M417 M430 M782 M903 R021 R041 Registry
Numbers 87140 1286M

Chemical Indexing M6 *03* Fragmentation Code M903 R021
R041 R111 R210 R263 Registry Numbers 87140 1286M

UNLINKED-DERWENT-REGISTRY-NUMBERS: ; 1845U

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0231 0402 0409 2001 2512 3250 2585 2604 2628 3252 2669
2766 3286

Multipunch 014 04- 074 075 076 231 24- 331 501 504 52& 525 532 533
Codes: 535 54& 541 542 55& 551 560 566 575 583 589 597 600 645
688

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1987-075773

Non-CPI Secondary Accession Numbers: N1987-136078

IPOS

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RF 240

In Reply Please Quote Our Reference

Your Ref : MJ/JOL/AA/PAT/8120607/SG
Our Ref : 2005026687/051121/TMBYX/5684
Date : 21/11/2005
Writer's Direct Line :

DREW & NAPIER LLC
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SINGAPORE 900302



*File (ref)
no: 21/4/06*

Dear Sir,

Singapore Patent Application No.: 200502668-7

Title of invention: **ADHESIVE COMPOSITION FOR DERMAL PATCH AND PRODUCTION
PROCESS THEREOF**

Applicant(s): **SHOWA DENKO K.K. (JP)**

INVITATION TO RESPOND TO WRITTEN OPINION

We forward with this letter a copy of the Written Opinion dated 13th October 2005 drawn up by the Examiner in connection with your request for a Search and Examination Report.

You are invited to respond to the opinion by submitting:

- (a) Written submissions or arguments disagreeing with the Examiner's opinion and/or
- (b) An amendment of the specification of the application.


If you intend to respond, the response must be filed within 5 months from the date of this letter. You are also advised to inform us early if you do not intend to respond.

The Examiner will proceed to establish the Examination Report if no response is received by the end of the prescribed period.

If you have any further queries, please do not hesitate to contact the undersigned.

Thank you.

Yours faithfully,


JUSTIN BEN YU XUAN
for REGISTRAR OF PATENTS
SINGAPORE

cc: **IP AUSTRALIA**
P O BOX 200 WODEN ACT 2606

A statutory board of the Ministry of Law





AUSTRALIAN PATENT OFFICE

WRITTEN OPINION

Date of mailing
day/month/year

13 OCT 2005

Applicant's or agent's file reference

MJ/JOL/AA/PAT/8120607/SG

REPLY DUE within FIVE MONTHS of the date of
the Registrar's letter enclosing the written opinion

Application No.

SG 200502668-7

Application Filing Date (day/month/year)

29 October 2003

Priority Date (day/month/year)

30 October 2002

International Patent Classification (IPC) (as indicated in the search report)

Int. CL. A61K 9/70, 31/485, 31/196; A61P 29/00

Applicant

SHOWA DENKO K.K. (JP)

1. This first written opinion consists of a total of 4 sheets.
2. This opinion contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - III ☐ Lack of unity of invention
 - IV ☒ Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - V ☐ Certain documents cited
 - VI ☐ Certain defects in the application
 - VII ☒ Certain observations on the application
3. This opinion is based upon the assumption that the priority claim is valid.
4. The search report used was issued by the European Patent Office, and the date of completion is: 11 March 2004
5. If no reply is filed, the examination report will be established on the basis of this opinion.
6. The date by which the examination report will be established is: 30 January 2007

Name and mailing address

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PO BOX 200, WODEN ACT 2606, AUSTRALIA
E-mail address: pct@ipaaustralia.gov.au
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Authorized Officer

N.L. KING

I. Basis of the opinion

1. This opinion has been drawn on the basis of:

☒ the application as originally filed.

☐ the description, pages , as originally filed,
pages , filed with the request,
pages , received on with the letter of

☐ the claims, pages , as originally filed,
pages , filed with the request,
pages , received on with the letter of

☐ the drawings, sheets/fig. , as originally filed,
sheets/fig. , filed with the request,
sheets/fig. , received on with the letters of

☐ the sequence listing part of the description:
pages , as originally filed
pages , filed with the demand
pages , received on with the letter of

2. The amendments have resulted in the cancellation of: pages:
sheets of drawings/figures No :

3 ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box.

4. Additional observations, if necessary:

IV. Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims 6, 8-10, 12	YES
	Claims 1-5, 7, 11, 13	NO
Inventive step (IS)	Claims 6, 8-10, 12	YES
	Claims 1-5, 7, 11, 13	NO
Industrial applicability (IA)	Claims 1 - 13	YES
	Claims	NO

2. Citations and explanations

Consideration was restricted to the following documents cited in the Search Report:-

D1 EP 1046395

D2 EP 0788794

D3 EP 0879597

D4 US 5607690

D5 US 6039971

NOVELTY(N) Claims 1-5, 7, 11, 13

Claim 1 defines an aqueous adhesive composition comprising a poly(meth)acrylate in the ammonium or alkali metal salt form (optionally poly(meth)acrylic acid is also present), a polyhydric alcohol and an aluminium compound. The composition is suitable for use as a dermal patch. The water content is 5-30%. As discussed on page 12, a water content higher than 30% impairs the solubility of medicaments (listed on pages 17-22) in the composition, thereby decreasing their diffusion and lowering absorption into the skin.

Claim 13 defines a process for producing such a composition.

Closely-related art appears in each of the above citations but most of the compositions described contain water at a level higher than the limit of 30%. However, the composition for topical use on page 4 of D1 contains sodium polyacrylate, 40% sorbitol as polyhydric alcohol, aluminium glycinate as aluminium compound and the water content is within the required range of 5-30%. Additional features defined in dependant claims are also to be found in this citation.

Consequently, claims 1-5, 7, 11 and 13 lack novelty compared to this citation.

INVENTIVE STEP(IS) Claims 1-5, 7, 11, 13

In view of the above, claims 1-5, 7, 11 and 13 also lack an inventive step when compared to D1.

VII. Certain observations on the application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

- ☒ The claimed invention is patentable according to Section 13(2); or
- ☐ The claimed invention is unpatentable according to Section 13(2) because: